Serial No. 09/813,965
April 29, 2004
Page 16

REMARKS

Claims 1-74 are now pending in this application. Reconsideration is requested.

Objections to Specification, Rejection of Claims under 35 U.S.C. § 112

The objection to the specification and the rejection of claims 1-72 under the first paragraph of 35 U.S.C. § 112 is traversed. The Office action asserts that no definition for the term "transneme" has been found in the Examiner's diligent search of both patent-related prior art and non-patent related prior art.

A fundamental principle of the U.S. patent law is that an applicant may act as his own lexicographer. Novo Nordisk of North America, Inc. v. Genentech, Inc., 77 F.3d 1364, 37 USPQ2d 1773 (Fed. Cir. 1996) (patentee can be his own lexicographer provided that he defines his terms). In re Paulsen, 30 F.3d 1475, 31 USPQ2d 1671 (Fed. Cir. 1994) (inventor is free to define the specific terms used to describe his or her invention). See also Apple Computer, Inc. v. Articulate Systems, Inc., 234 F.3d 14, 57 USPQ2d 1057 (Fed. Cir. 2000) (patentee is free to be own lexicographer, and may define terms in ways that differ from common understanding of those skilled in the art); Renishaw PLC v. Marposs Societa' Per Azioni, 158 F.3d 1243, 48 USPQ2d 1117 (Fed. Cir. 1998) (when a patent applicant has elected to be a lexicographer by providing an explicit definition in the specification for a claim term, the definition selected by the patent applicant controls).

The term "transneme" is fully defined and exhaustively explained in the specification. See e.g. paragraphs 44, 45, 57, 58, 68, 73, 84 and 97, and Figs. 10, 11 and 14-16. In particular, the present invention defines the term "transneme" as "a transition between the phoneme or allophone components of human speech." Specification at 14, ¶ 44.

In contravention of the canonical teaching of the prior art, which carries out speech recognition by extracting and identifying phonemes, the present invention searches for and identifies transitions between and within phonemes. The inventor defines such transitions as "transnemes." As shown in Figs. 10 and 11, one way of identifying transnemes is to compare the frequency spectra of two adjacent time frames of a voice stream signal to determine the difference therebetween. The characteristics or

signature of such difference is then used to identify a particular transneme by mapping to a database. Identified transnemes in turn are used to identify corresponding speech units by mapping to a database.

The specification fully and completely teaches those skilled in the art how to perform speech recognition using transnemes, as defined in the specification. Therefore, claims 1-74 are supported by an enabling disclosure, and are proper. Reconsideration and withdrawal of the objections and rejections based on this ground is therefore requested.

Rejection of Claims under 35 U.S.C. § 103

The rejection of claims 1-72 under 35 U.S.C. § 103 as allegedly being obvious over various combinations and permutations of the cited prior art references to Munsell, Ozawa, Braida, Sharman, Goodridge, Hershkovits, Guberman, Mozer, Timms, Palakoff, Hunlich, Huang, Jimenez, Asghar, Cline, Takatori, Svensson, Ney, Komissarchik, Holzrichter, Liaguno, Henderson, Lockwood, Iyengar, Pappas and Hirokazu, is respectfully traversed.

It is respectfully submitted that the impropriety of the multifarious rejection of the claims is established by the Examiner's own admissions that "[d]efinition for the term 'transneme' has not been found in diligent search of non-patent and prior art," and that "[d]efinition of the term was sought by the Examiner in all sources of prior art, educators and the Internet, to no avail."

Contrary to establishing a violation of the enablement requirement under 35 U.S.C. § 112, the lack of existence of any prior definition of the term transneme, together with the complete, full and exhaustive disclosure and explanation of the use of transnemes in speech recognition in the present application, instead establishes that the present invention is of a pioneering status and as such is entitled to the broadest scope of patent protection possible. Perkin-Elmer Corp. v. Westinghouse Electric Corp., 822 F.2d 1528, 3 USPQ2d 1321 (Fed. Cir. 1987). Claims 73 and 74 have been added to provide the applicant with such protection.

By the Examiner's own admission, use of transnemes is unheard of in the prior art. All of the claims pending in this application require the use of transnemes, and the Examiner is required to construe the term transneme as the applicant has defined it,

Renishaw PLC, *supra*. Therefore, the Examiner's interpretation of the term transneme to indicate "any speech signal feature" is improper and erroneous as a matter of law. The only manner in which the 26 prior art references relied upon could be used to reject the claims is by using this improper claim construction, and therefore the rejection of the claims as being unpatentable over the prior art under 35 U.S.C. § 103 also is improper as a matter of law. Reconsideration and withdrawal of these grounds of rejection is vigorously urged.

Conclusion

In view of the foregoing, claims 1-74 are respectfully submitted to be patentable over the prior art of record, whether considered individually or in combination. Favorable reconsideration of this application, withdrawal of all outstanding grounds of rejection and objection, and the issuance of a Notice of Allowance are earnestly solicited.

Please charge any fee or credit any overpayment pursuant to 37 CFR 1.16 or 1.17 to Deposit Account No. 02-2135.

RESPECTFULLY SUBMITTED,					
NAME AND REG. NUMBER	Vincent M. DeLuca Attorney for Applicant Registration No. 32,408				
SIGNATURE	*Vincent M. De Luca*			DATE	29 APR 04

Address	Rothwell, Figg, Ernst & Manbeck 1425 K Street, N.W., Suite 800				
City	Washington	State	D.C.	Zip Code	20005
Country	U.S.A.	Telephone	202-783-6040	Fax	202-783-6031